

What is Claimed:

1. An edge seal assembly for use with a nip roller set, comprising
an edge wire;
an edge wire support;

5 a bearing sleeve which receives a driving member of a film driving mechanism such that
said edge wire support retains an edge seal position while said driving member rotates within the
sleeve.

2. The edge seal assembly as recited in claim 1 wherein said edge seal support includes
an insert head and a housing receiving said insert head.

10 3. The edge seal assembly as recited in claim 2 wherein said housing includes a pair of
side positioning members between which said insert head is positioned.

4. The edge seal assembly as recited in claim 3 wherein said side positioning members
include a pair of shoes releasably secured to said housing.

15 5. The edge seal assembly as recited in claim 4 wherein said shoes are electrically
conductive and said housing is electrically insulating.

6. The edge seal assembly as recited in claim 1 wherein said bearing sleeve includes a
friction reducing roller bearing on an interior surface and further includes an intermediate slot
dimensioned for receipt of the electrically conductive housing.

20 7. The edge seal assembly as recited in claim 1 further comprising a first roller member
having means for attachment with a rotating roller component of the nip roller set, and said first
roller member being free to rotate relative to said sleeve.

8. The edge seal assembly as recited in claim 1 further comprising a second roller member having means for attachment with a rotating roller component of the nip roller set, and said second roller member being free to rotate relative to said sleeve.

9. The edge seal assembly as recited in claim 1 wherein said support includes a base block and a housing member releasable secured to said base block, and said block and housing having a cavity for receiving the driving member of the nip roller set.

10. The edge seal assembly as recited in claim 9 further comprising a pair of electrical conductor extensions and wherein said base block and housing are releasably secured by said electrical conductor extensions extending within each of said housing and base block.

11. The edge seal assembly as recited in claim 10 wherein said housing includes a pair of side positioning members between which said insert head is positioned and said side positioning members include a pair of shoes releasably secured to said housing and said conductor extensions are a pair of conductor pins with each being in electrical communication with a respective one of said shoes.

12. The edge seal assembly as recited in claim 1 further comprising a guide pin which extends into said head insert which head insert is slidably supported thereon.

13. The edge seal assembly as recited in claim 1 wherein said support includes a housing receiving a pair of releasable shoes formed of a conductive material and said head insert includes an upper wire portion and two conducting side extensions of said upper wire portion which are placed in electrical communication with said shoes.

14. The edge seal assembly as recited in claim 1 further comprising a wire formed of a material with a TCR value which increases by at least .008 ohm per 10 degree rise in temperature between 350 to 425 degrees.

15. An edge seal assembly comprising:

an edge seal support; and

an edge seal wire having a TCR value of .00015 to .00030 ohm/ohm/degree Celsius at 20 degrees Celsius resistivity for a 0 to 100 degrees Celsius and a ohms/CMF of from 350 or more.

5 16. An edge seal assembly; comprising:

an edge seal heater element;

a sleeve;

an edge seal support fixed to said sleeve and supporting the edge seal heater element;

a roller bearing supported by said sleeve and dimensioned for receipt of a roller shaft of a

10 film driving mechanism.

17. The edge seal as recited in claim 16 wherein said heater element is a resistance wire.

18. The edge seal as recited in claim 16 further comprising a roller which is slidingly received on said sleeve and has means for releasably fixing to a rolling component of the nip roller

15 19. An edge seal assembly comprising:

an edge seal heater element;

a support for said edge seal heater element;

a control system in electrical communication with said heater element and said control system including means for comparing resistance levels at a current temperature and comparing
20 with a TCR value reference.

20. A method of sealing an edge of a bag in a foam-in-bag assembly comprising:

providing an edge sealer which is supported on a moving drive member of a film drive mechanism while retaining a non-rotating edge seal position relative to film being fed past the edge sealer;

5 heating a heating element of the edge sealer to form an edge seal in a bag of the foam-in-bag assembly.

21. A foam-in-bag assembly; comprising:

a film feed mechanism which feeds film with a film driver;

a bag forming assembly which comprises an edge sealer that contacts film being fed by said film driver and which is supported on a moving member of said film feed mechanism and
10 retains a fixed position relative to said moving member while in sealing engagement with said film being fed by said film driver;

a dispenser for feeding foam forming material to a bag being formed by said bag forming assembly.

22. The foam-in-bag assembly of claim 21 wherein said film feed mechanism includes a
15 pair of nip rollers which receive film therebetween, and wherein said film feed mechanism includes a roller support for one of said rollers that is adjustable between a first position and a second position which is further removed from an opposing one of said nip rollers

23. The foam-in-bag assembly of claim 22 wherein said support is pivotably supported on said film.

20 24. The foam-in-bag assembly of claim 23 wherein said bag forming assembly further comprises cross-cut forming means for forming a cross cut in a bag being formed by said bag forming assembly, and wherein said cross cut forming means is received by said roller support and adjustable therewith.

25. The foam-in-bag assembly as recited in claim 24 wherein said cross-cut forming means includes a cross-cut wire and cross cut wire base, with said cross cut wire having pin conductors at opposite ends dimensioned for sliding reception and removal relative to pin reception ports in said cross-cut wire base.

5 26. The foam-in-bag assembly as recited in claim 25 further comprising a pair of cross-seal wires each having pin conductors at opposite ends dimensioned for sliding reception and removal relative to pin reception ports in a cross-cut wire base and said cross-seal wires being positioned to opposite sides of said cross-cut wire.

10 27. The foam-in-bag assembly as recited in claim 22 wherein said support is a front access door of the foam-in-bag assembly.

28. The foam in bag assembly as recited in claim 27 further comprising a latch mechanism for retainment of the roller support in a film feed position.

29. The foam-in-bag assembly as recited in claim 27 further comprising a door movement controller which prevents free fall of said door upon release of said latch.

15 30. A foam-in-bag assembly comprising:

a cross cut wire base;

a cam operated driving system in driving engagement with said cross cut wire base for moving said cross cut wire base between a cross cut and non-cross cut relationship relative to film material.

20 31. The assembly of claim 30 wherein said cam operated driving system further comprising a biasing device which is designed to accommodate for deviation relative an opposite base block between which the film being pinched is received.